

FIG. 1.

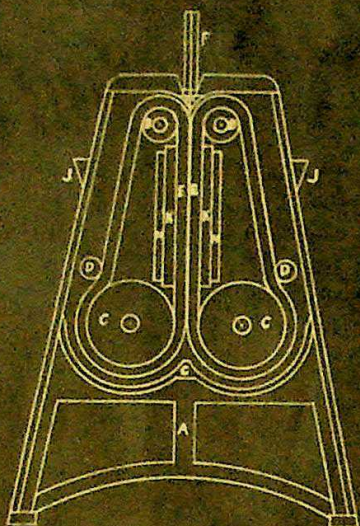


FIG. 2.

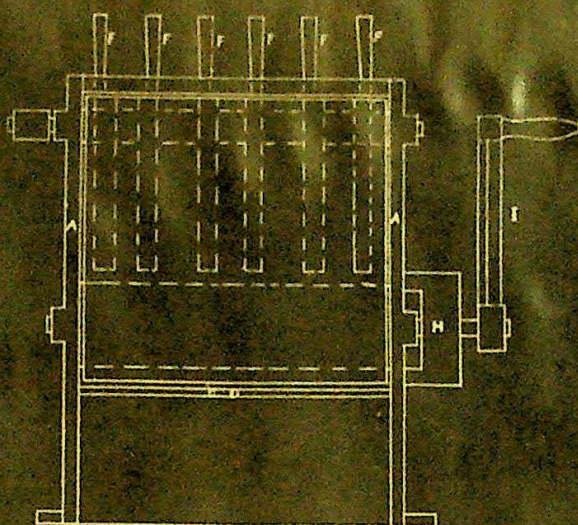


FIG. 3.

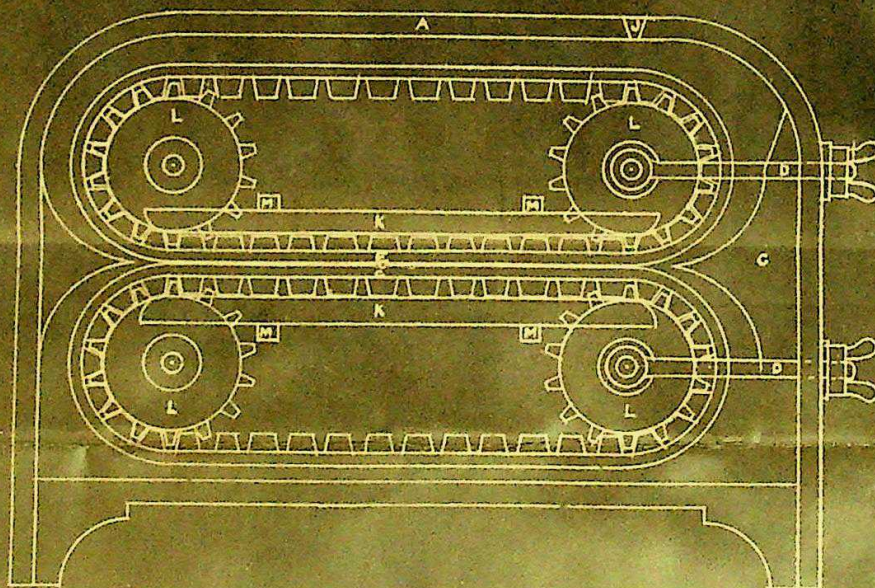
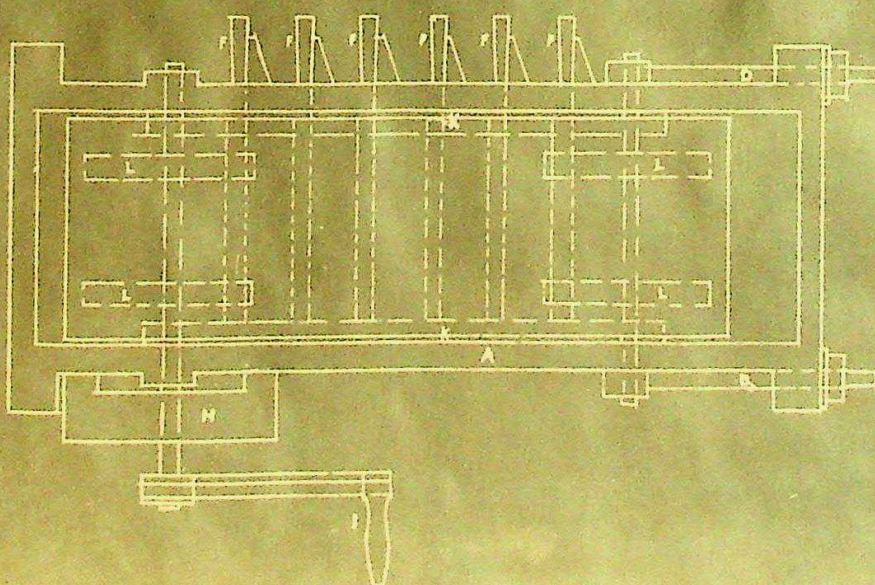


FIG. 4.



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Burley Launery

A.D. 1884, 8th JANUARY. N° 910.

Improvements in Knife Cleaning Machines.

PROVISIONAL SPECIFICATION.

I, JOHN ELLISON 51 Burley Street Leeds in the County of York Engineer do hereby declare the nature of my invention for IMPROVEMENTS IN KNIFE CLEANING MACHINES to be as follows:—

- The object of this Invention, is a Special arrangement, for forming a Machine;
- 5 for Cleaning the Blades of Knives, in a longitudinal, or diagonal, direction, with a gentle rubbing, action, and that the whole length of the blade, is subject to an equal rubbing surface; and the novel arraignment of the Machine admits of Cleaning a large number of Knives at one time, without Grinding the Tarnish off or damage to the knife;
- 10 In the construction of the Machine the frame or outside caseing can be made of Wood, or Iron, or a combination, of Wood and Iron, with suitable bearings, to carry the necessary Shafts, and the Frames, can stand at any angle, from verticul, to horizontal, I will now describe it as Virtical viz. I mount a couple of Roller's on the Top End of the Machine. Parallel to each other, on an horizontal plane, and
- 15 distant from each other according to the thickness of two Belts (hearafter described) Again I mount a couple of Rollers at the Bottom End of the Machine and parallel to the above mentioned Top rollers, and equal distance, from each other, the same as the above mentioned top Rollers; to admit of the thickness of the two Belts, Then I fix two endless Belts from the Top Rollers to the Bottom Rollers
- 20 so that those Belts will press firmly together, between the two top rollers, and also between the bottom Rollers, as before mentioned, and the Knives to be cleaned are inserted between the two aforesaide Belts, either in a longitudinal, or in a diagonal, direction, according as the Machines are arrainged to receive the same, Near the bottom Rollers I fix a Trough to hold the Emery, powder, so that when the
- 25 Machine is working the two belt moveing in the Emery in opposite directions from each other, will each continually, take up a portion of the Emery, and elivate it, so as to pass through the Top Rollers, & between the belts, at the place where the Knives are inserted; and will thereby cause an automatic feed; The Machine will be worked from one of the Roller Shafts by Handle in the ordinary way, and the
- 30 two Rollers connected with a pair of Spur wheels—to work in each other.

Dated this Seventh day of January 1884.

JOHN ELLISON,

Ellison's Improvements in Knife Cleaning Machines.

COMPLETE SPECIFICATION.

I, JOHN ELLISON, of 51 Burley Street Leeds in the County of York Engineer do hereby declare the nature of my invention for IMPROVEMENTS IN KNIFE CLEANING MACHINES and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The object of this Invention is a special arrangement for forming a Machine for 5
cleaning the Blades of Knives, in a longitudinal, or diagonal, direction, with a
gentle rubbing action, so that the whole length of the blade, is subject to an equal,
rubbing, surface, on both sides of the Blade at the same time, and a novel
arrangement of the Machine admits of cleaning a large number of Knives at one
and the same time, without grinding the tarnish off the blades or damaging the 10
Knife handles; In the construction of the Machines, the Frame or outside casing,
can be made of Wood or Iron, or a combination of Wood, and Iron, with suitable
bearings to carry the necessary Roller Shafts, and the frames can stand at any angle
from Vertical to horizontal; I will now describe it as Vertical.

Viz I mount a couple of Rollers on the top end of the Machine, Parallel to each 15
other on an horizontal Plane and distant from each other according to the thickness
of the two belts (hereafter described) Again I mount a couple of roller's at a
certain distance from the above mentioned, on an horizontal plane and parallel to
the mentioned top roller's and equal distance from each other, to admit of the
thickness of the two belts, then I fix two endless belts, round the top roller, and 20
from the top to, and round the bottom Roller, then I fix two slides, longitudinally
between the top and bottom roller's (and by the use of India rubber springs) the
whole length of the belts, from the top to the bottom roller's are held in just sufficient
contact to give the Knives, a gentle rubbing action and the Knives to be cleaned
are inserted at the top end of the Machine, between the aforesaid two belts; under 25
the bottom roller's a trough is arranged to receive the Emery powder, so that the
belts will feed the Machine automaticly, The Machines is propeld by a handle
from one of the Roller Shafts, and the said roller's are connected together with a
pair of Spur wheels, working in each other.

Referring to the Machine when placed horizontally and to clean the Knives in a 30
diagonal or cross way from the above mentioned Machine, I prefer using chain
Pulley's instead of roller's, at each end of the Machine and cross pieces of wood to
support the belts, and also sectional slides to carry the same, and by making the
Machine Broad enough for the length of two Knives, they can be inserted from
both sides of the Machine, and consequently will clean double the quantity of 35
Knives for the same length of Machine.

Such being the nature and object of this my Invention and in order that the
same may be fully understood I, hereby annex one sheet of Drawings and have
marked the same with fig's and letter's of reference like letter's and fig's denoting
like parts. 40

Fig. 1. is a Sectional Elevation (or end view) of the Vertical Machine.

" 2 is a Sectional Elevation of front of the same Machine.

" 3 is a Sectional Elevation (or end view) of the horizontal Machine.

" 4 is a Plan of the same Machine.

A is the Frame. B is the top Roller's, C is the bottom Roller's D is the 45
tightning Roller's, E is the Belts. F is the Knives, G is the trough to hold the
Emery. H is the spur wheels cover which is not shown on figs. 1. and 3. I is
the handle. J is the feed spouts or door's working on an hinge to open and close,

Ellison's Improvements in Knife Cleaning Machines.

also answer's as a name plate. K is the slides. L is the chain pullies or wheels
M is the slide beam's, N is the India rubber springs, D¹ is the screws for tightening
the Belts.

Having now particularly described and ascertained the nature of my said
5 Invention, and in what manner the same is to be performed, I declare that what
I claim is

A Machine for cleaning knives consisting of two endless revolving bands
supplied automatically with emery powder, and other mechanical arrangements,
essentially as herein before set forth and illustrated in the accompanying drawings.

10 Dated this 2nd day of October 1884.

JOHN ELLISON.

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Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

1884.